Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Docket No.: C1271.70022US02

Listing of Claims

1. (Currently amended) A compound of the Formula (I-1):

wherein:

X is alkylene optionally interrupted by one or more -O- groups;

Z is -C(O)-;

 R_{1-1} is selected from the group consisting of:

hydrogen,

alkyl,

phenyl aryl,

alkylene-aryl,

heteroaryl,

alkylene heteroaryl,

-N(CH₃)(OCH₃), and

alkyl [[,]] <u>or phenyl</u>, aryl, alkylene aryl, heteroaryl, or alkylene heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen,

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

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haloalkyl,
                 haloalkoxy, and
                 alkyl,
                 NH SO<sub>2</sub> R<sub>1-4</sub>,
                 -NH-C(O)-R_{1-4}
                 -NH-C(O)-NH_2
                 NH C(O) NH R<sub>1-4</sub>, and
                 -N_3;
R<sub>1-4</sub> is selected from the group consisting of:
        alkyl,
        aryl,
        alkylene aryl,
        heteroaryl,
        alkylene-heteroaryl, and
        alkyl, aryl, alkylene aryl, heteroaryl, or alkylene heteroaryl substituted by one or
more substituents selected from the group consisting of:
                 halogen,
                 <del>cyano,</del>
                 nitro,
                 alkoxy,
                 dialkylamino,
                 alkylthio,
                 haloalkyl,
                 haloalkoxy,
                 alkyl, and
                 -N_3; and
R<sub>2</sub> is selected from the group consisting of:
        hydrogen,
        <u>alkyl,</u>
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hydroxyalkyl, and

alkyloxyalkyl;

 $-\mathbf{R}_{47}$

 $X'R_{47}$

 $-X'-Y'-R_4$, and

 $-X'-R_5$;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, and heteroarylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, or heteroarylene, and optionally interrupted by one or more—O—groups;

Y' is selected from the group consisting of:

 $-S(O)_{-0.2}$

 $-S(O)_2-N(R_8)-$

 $-C(R_6)$

 $-C(R_6)-O$,

 $-O-C(R_6)$,

-O-C(O)-O-

 $-N(R_8)-Q'$

 $-C(R_6) N(R_8)$,

-O $C(R_6)$ $N(R_8)$,

 $-C(R_6)-N(OR_9)$,

R₄ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, and alkylheteroarylenyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryloxy, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, and alkynyl, oxo;

R₅ is selected from the group consisting of:

$$\begin{array}{c|c} -N - C(R_6) & -V - N \\ \hline R_7 & -and \end{array}$$

 R_6 is selected from the group consisting of =0 and =S;

R₇ is a C₂₋₇ alkylene;

R₈ is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

 R_9 is selected from the group consisting of hydrogen and alkyl;

R₁₀ is C₃₋₈ alkylene;

A is selected from the group consisting of $-O_{-}$, $-C(O)_{-}$, $-S(O)_{-0.2}$, $-CH_{2-}$, and $-N(R_4)_{-}$;

Q' is selected from the group consisting of a bond, $C(R_6)$, $C(R_6)$, $C(R_6)$, $S(O)_2$, and $S(O)_2$ $N(R_8)$;

V is selected from the group consisting of $-C(R_6)$, $-O - C(R_6)$, and $-S(O)_2$; a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7 ;

R_A and R_B are each independently selected from the group consisting of:

hydrogen,

halogen,

alkyl,

alkenyl,

alkoxy,

alkylthio, and

 $-N(R_9)_2;$

or- R_A and R_B <u>are</u> taken together <u>to</u> form either a fused aryl ring that is unsubstituted or substituted by one or more R groups, or a fused 5 to 7 membered saturated ring that is unsubstituted or substituted by one or more R_a groups;

R is selected from the group consisting of:

fluoro,

alkyl,

haloalkyl,

alkoxy, and

 $-N(R_9)_2$; and

R_a is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

 $-N(R_9)_2$;

or a pharmaceutically acceptable salt thereof.

2. (Currently amended) A compound of the Formula (I-2):

I-2

wherein:

X is alkylene optionally interrupted by one or more -O- groups;

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n is an integer from 0 to 4;
         Z is -C(O)-;
         R_{1-1} is selected from the group consisting of:
                  hydrogen,
                  alkyl,
                  phenyl aryl,
                  alkylene aryl,
                  heteroaryl,
                  alkylene-heteroaryl,
                  -N(CH<sub>3</sub>)(OCH<sub>3</sub>), and
                  alkyl [[,]] or phenyl, aryl, alkylene aryl, heteroaryl, or alkylene heteroaryl substituted
by one or more substituents selected from the group consisting of:
                           halogen,
                           <del>cyano,</del>
                           nitro,
                           alkoxy,
                           dialkylamino,
                           alkylthio,
                           haloalkyl,
                           haloalkoxy, and
                           alkyl,
                           NH SO<sub>2</sub> R<sub>1-4</sub>,
                           \frac{\text{NH C(O) R}_{1-4}}{\text{NH C(O) R}_{1-4}}
                           -NH-C(O)-NH_2
                           -NH-C(O)-NH-R<sub>1-4</sub>, and
                           -N_3;
         R<sub>1-4</sub> is selected from the group consisting of:
                  <del>alkyl,</del>
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<del>aryl,</del>
        alkylene-aryl,
        heteroaryl,
        alkylene heteroaryl, and
        alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or
more substituents selected from the group consisting of:
                halogen,
                <del>cyano,</del>
                nitro,
                alkoxy,
                dialkylamino,
                alkylthio,
                haloalkyl,
                haloalkoxy, alkyl, and
                -N_3;
and R is selected from the group consisting of:
        fluoro,
        alkyl,
        haloalkyl,
        alkoxy, and
        -N(R_9)_2;
R<sub>2</sub> is selected from the group consisting of:
        hydrogen,
        alkyl,
        hydroxyalkyl, and
        alkyloxyalkyl;
        -\mathbf{R}_{47}
        X'R_4
        -X'-Y'-R_4, and
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$-X'-R_5$;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, and heteroarylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene or heteroarylene, and optionally interrupted by one or more O-groups;

Y' is selected from the group consisting of:

$$\begin{array}{c} \underline{S(O)_{0.2}}, \\ \underline{S(O)_2 \ N(R_8)}, \\ \underline{-C(R_6)}, \\ \underline{-C(R_6)}, \\ \underline{-C(R_6)}, \\ \underline{-O \ C(O) \ O}, \\ \underline{-N(R_8)}, \underline{Q'}, \\ \underline{-C(R_6)}, \underline{N(R_8)}, \\ \underline{-C(R_6)}, \underline{N(R_8)}, \\ \underline{-C(R_6)}, \underline{N(OR_9)}, \\ \underline{-N-R_7-N-Q'-}, \\ \underline{-R_{7}}, \underline{-nd}, \\ \underline{-V-N}, \\ \underline{-R_{10}}, \\ \underline{-N-R_7-N-Q'-}, \\ \underline{-N-R_7-$$

R₄ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, and alkylheteroarylenyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, and alkylheteroarylenyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy,

hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, and alkynyl, oxo;

R₅ is selected from the group consisting of:

$$\begin{array}{c|c} -N - C(R_6) & -V - N - A \\ \hline R_7 & -and & (CH_2)_b \\ \hline \end{array} ;$$

 R_6 is selected from the group consisting of =0 and =S;

R₇ is a C₂₋₇ alkylene;

R₈ is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R₉ is selected from the group consisting of hydrogen and alkyl;

R₁₀ is C₃₋₈ alkylene;

A is selected from the group consisting of O, C(O), $S(O)_{0.2}$, CH_2 , and $N(R_4)$;

Q' is selected from the group consisting of a bond, $C(R_6)$, $C(R_6)$, $C(R_6)$, $S(O)_2$, and $S(O)_2$ -N(R₈);

V is selected from the group consisting of $-C(R_6)$ -, $-O-C(R_6)$ -, and $-(O)_2$ -; and a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7 ; or a pharmaceutically acceptable salt thereof

3.4. (Canceled)

5. (Currently amended) A compound of the Formula (Ia):

$$(R)_n$$
 R_2
 R_1

Ia

wherein:

X is alkylene optionally interrupted by one or more -O- groups;

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n is an integer from 0 to 4;
         R_{1-1} is selected from the group consisting of:
                 hydrogen,
                 alkyl,
                 phenyl aryl,
                 alkylene aryl,
                 heteroaryl,
                 alkylene-heteroaryl,
                 -N(CH<sub>3</sub>)(OCH<sub>3</sub>), and
                 alkyl [[,]] or phenyl, aryl, alkylene aryl, heteroaryl, or alkylene heteroaryl substituted
by one or more substituents selected from the group consisting of:
                          halogen,
                          <del>cyano,</del>
                          nitro,
                          alkoxy,
                          dialkylamino,
                          alkylthio,
                          haloalkyl,
                          haloalkoxy, and
                          alkyl,
                          -NH-SO<sub>2</sub>-R<sub>1-4</sub>
                          NH C(O) R<sub>1-4</sub>,
                          NH C(O) NH<sub>2</sub>,
                          -NH-C(O)-NH-R<sub>1-4</sub>, and
                          -N_3;
         R<sub>1-4</sub> is selected from the group consisting of:
                 alkyl,
                 aryl,
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alkylene-aryl,
        heteroaryl,
        alkylene heteroaryl, and
        alkyl, aryl, alkylene aryl, heteroaryl, or alkylene heteroaryl substituted by one or
more substituents selected from the group consisting of:
                halogen,
                <del>cyano,</del>
                nitro,
                alkoxy,
                dialkylamino,
                alkylthio,
                <del>haloalkyl,</del>
                haloalkoxy,
                alkyl, and
                -N_{3};
R is selected from the group consisting of:
        fluoro,
        alkyl,
        haloalkyl,
        alkoxy, and
        -N(R_9)_2;
R<sub>2</sub> is selected from the group consisting of:
        hydrogen,
        alkyl,
        hydroxyalkyl, and
        alkyloxyalkyl;
        hydrogen,
        alkyl,
        alkenyl,
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aryl,
        heteroaryl,
        heterocyclyl,
        alkylene Y alkyl,
        alkylene-Y-alkenyl,
        alkylene-Y-aryl, and
        alkyl or alkenyl substituted by one or more substituents selected from the group
consisting of:
                hydroxy,
                halogen,
                -N(R_3)_{27}
                -C(O) C_{1-10}alkyl,
                -C(O)-O-C_{1-10}alkyl,
                -N(R_3)-C(O)-C_{1-10}alkyl,
                -N_{37}
                <del>aryl,</del>
                heteroaryl,
                heterocyclyl,
                -C(O) aryl, and
                -C(O) heteroaryl;
wherein:
        Y is -O - or -S(O)_{0.2};
        R<sub>3</sub> is selected from the group consisting of:
                hydrogen,
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 R_9 is selected from the group consisting of hydrogen and alkyl; or a pharmaceutically acceptable salt thereof.

C₁₋₁₀alkyl, and

 C_{2-10} alkenyl; and

6.-7. (Canceled)

8. (Currently amended) A compound of the Formula (Ie):

$$R_{1}$$
 R_{2}
 R_{2}
 R_{3}
 R_{2}
 R_{3}
 R_{2}
 R_{3}
 R_{2}
 R_{3}
 R_{4}

wherein:

X is alkylene optionally interrupted by one or more -O- groups;

n is an integer from 0 to 4;

R is selected from the group consisting of:

fluoro,

alkyl,

alkoxy,

haloalkyl, and

 $-N(R_9)_2$;

R₂ is selected from the group consisting of:

hydrogen,

alkyl,

hydroxyalkyl, and

alkyloxyalkyl;

hydrogen,

alkyl,

alkenyl,

aryl,

heteroaryl,

heterocyclyl,

alkylene-Y-alkyl,

alkylene-Y-alkenyl,

alkylene Y aryl, and

alkyl or alkenyl substituted by one or more substituents selected from the group

consisting of:

hydroxy,

halogen,

 $-N(R_3)_{27}$

 $-C(O)-C_{1-10}$ alkyl,

 $-C(O)-O-C_{1-10}$ alkyl,

 $-N(R_3)$ C(O) C_{1-10} alkyl,

 $-N_{37}$

aryl,

heteroaryl,

heterocyclyl,

-C(O) aryl, and

-C(O)-heteroaryl;

wherein:

Y is O or $S(O)_{0,2}$; and

R₃ is selected from the group consisting of:

hydrogen,

C₁₋₁₀alkyl, and

 C_{2-10} alkenyl; and

 R_9 is selected from the group consisting of hydrogen and alkyl; or a pharmaceutically acceptable salt thereof.

9.10. (Canceled)

11. (Previously presented) The compound or salt of claim 2 wherein n is 0.

- 12.-17. (Canceled)
- 18. (Currently amended) The compound or salt of claim 1 wherein R_{1-1} is selected from the group consisting of aryl phenyl, alkyl, and -N(CH₃)OCH₃.
- 19. (Canceled)
- 20. (Previously presented) The compound or salt of claim 1 wherein X is a C_{1-6} alkylene or $-(CH_2)_{2-4}$ -O- $-(CH_2)_{1-3}$ -.
- 21. (Original) The compound or salt of claim 20 wherein X is selected from the group consisting of $-(CH_2)_{1-6}$, $-CH_2$ - $-(CH_3)_2$, $-(CH_2)_2$ -O- $-(CH_2)_3$ -O--(C
- 22. (Currently amended) The compound or salt of claim 1 wherein R_{1-1} is selected from the group consisting of alkyl and phenyl aryl.
- 23. (Currently amended) The compound or salt of claim $\underline{1}$ $\underline{22}$ wherein R_{1-1} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, cyclopropyl, n-butyl, sec-butyl, isobutyl, tert-butyl, n-pentyl, cyclopentyl, n-hexyl, cyclohexyl, phenyl, 4-chlorophenyl and 2,4-dichlorophenyl.
- 24.-25. (Canceled)
- 26. (Currently amended) The compound or salt of claim $\frac{25}{1}$ wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, methyl, ethyl, n-propyl, n-butyl, ethoxymethyl, and 2-methoxyethyl.

27.-28. (Canceled)

- 29. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 1 in combination with a pharmaceutically acceptable carrier.
- 30. (Withdrawn) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 1 to the animal.
- 31. (Withdrawn) A method of treating a viral disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of claim 1 to the animal.
- 32. (Withdrawn) A method of treating a neoplastic disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of claim 1 to the animal.

33.-35. (Canceled)

- 36. (Previously presented) The compound or salt of claim 2 wherein X is a C_{1-6} alkylene or $-(CH_2)_{2-4}$ -O- $-(CH_2)_{1-3}$ -.
- 37. (Previously presented) The compound or salt of claim 36 wherein X is selected from the group consisting of $-(CH_2)_{1-6-}$, $-CH_2-C(CH_3)_{2-}$, $-(CH_2)_2-O-CH_2-$, $-(CH_2)_3-O-CH_2-$.
- 38. (Currently amended) The compound or salt of claim 2 wherein R_{1-1} is selected from the group consisting of alkyl and <u>phenyl</u> aryl.
- 39. (Currently amended) The compound or salt of claim $\underline{2}$ 38 wherein R₁₋₁ is selected from the group consisting of methyl, ethyl, *n*-propyl, isopropyl, cyclopropyl, *n*-butyl, *sec*-butyl,

isobutyl, *tert*-butyl, *n*-pentyl, cyclopentyl, *n*-hexyl, cyclohexyl, phenyl, 4-chlorophenyl and 2,4-dichlorophenyl.

- 40. (Canceled)
- 41. (Currently amended) The compound or salt of claim $40 \ \underline{2}$ wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, methyl, ethyl, n-propyl, n-butyl, ethoxymethyl, and 2-methoxyethyl.
- 42. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 2 in combination with a pharmaceutically acceptable carrier.
- 43. (Withdrawn) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 2 to the animal.
- 44.-53. (Canceled)
- 54. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 8 in combination with a pharmaceutically acceptable carrier.
- 55. (Withdrawn) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 8 to the animal.